

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method for routing packets in a network in conjunction with a quality of service guarantee, comprising:

receiving a packet having a header section and a payload section;

inspecting the payload section of the packet in a network core as a prelude to routing the packet, the step of inspecting, comprising:

extracting data attributes from the payload section,

comparing the extracted data attributes to two or more attributes filters, and

if the comparing step indicates that each of the two or more attributes filters is satisfied, performing a set of functions;

determining a quality of service guarantee for the packet, said quality of service guarantee is associated with a reserved bandwidth; and

selectively routing the packet based upon the inspecting and the quality of service guarantee,

wherein each attributes filter describes a set of events that a subscriber is interested in receiving from publishers.

Claim 2 (Cancelled).

Claim 3 (Original): The method of claim 1, further including performing the inspecting step at a router in the network core.

Claim 4 (Cancelled).

Claim 5 (Currently Amended): The method of claim [[4]]1, further including propagating the attribute filters to a router in the network for use in performing the inspecting.

Claim 6 (Original) The method of claim 1, further including programming a router in the network for performing the receiving, inspecting, and routing steps.

Claim 7 (Previously Presented): The method of claim 1 wherein the set of functions includes determining how to route the packet.

Claim 8 (Currently Amended): A method for routing messages in a network, comprising:

- receiving a message having a header section, at least one subject, and a plurality of data attributes;

- retrieving the subject and the data attributes from the message;

- retrieving a subscription based upon the subject;

- determining a quality of service guarantee for the message, said quality of service guarantee is associated with a reserved bandwidth;

- applying the data attributes to the subscription in a network core in order to determine how to route the message, the subscription specifying a plurality of filters, the step of applying the data attributes, comprising:

- extracting data attributes from the payload section,

- comparing the extracted data attributes to two or more attributes filters, and

- if the comparing step indicates that each of the two or more attributes filters is satisfied, performing a set of functions; and

- selectively routing the message based upon the applying and the quality of service guarantee,

- wherein each attributes filter describes a set of events that a subscriber is interested in receiving from publishers.

Claim 9 (Cancelled).

Claim 10 (Previously Presented): The method of claim 8, wherein the set of functions includes routing the message.

Claim 11 (Previously Presented): The method of claim 8, further including discarding the message if any of the two or more attribute filters is not satisfied.

Claim 12 (Cancelled).

Claim 13 (Original): The method of claim 8, further including performing the inspecting step at a router in the network core.

Claim 14 (Currently Amended): An apparatus for routing packets in a network in conjunction with a quality of service guarantee, comprising a processor and a memory, said processor comprising:

means for receiving a packet having a header section and a payload section;

means for inspecting the payload section of the packet in a network core, an inspection comprising:

extracting data attributes from the payload section,

comparing the extracted data attributes to two or more attributes filters, and

if the comparing step indicates that each of the two or more attributes filters is satisfied, determining how to route the packet;

means for determining a quality of service guarantee for the packet, said quality of service guarantee is associated with a reserved bandwidth; and

means for selectively routing the packet based upon the inspection results obtained from and the quality-of-service guarantees determined by the inspecting and quality of service modules above,

wherein each attributes filter describes a set of events that a subscriber is interested in receiving from publishers.

Claim 15 (Cancelled).

Claim 16 (Previously Amended): The apparatus of claim 14, wherein said processor further comprises means for performing the inspecting step at a router in the network core.

Claim 17 (Cancelled).

Claim 18 (Previously Amended): The apparatus of claim 14, wherein said processor further comprises means for propagating the filter to a router in the network for use in performing the inspecting.

Claim 19 (Previously Amended): The apparatus of claim 14, wherein said processor further comprises means for programming a router in the network for performing the receiving, inspecting, and processing.

Claim 20 (Original): The apparatus of claim 14, wherein the apparatus is a router.

Claim 21 (Currently Amended): An apparatus for routing messages in a network, comprising a processor and a memory, said processor comprising:

means for receiving a message having a header section, at least one subject, and a plurality of data attributes;

means for retrieving the subject and the data attributes from the message;

means for retrieving a subscription based upon the subject, wherein the means for retrieving the subscription includes means for retrieving a plurality of filters corresponding with the subscription;

means for matching the data attributes to the plurality of filters in a network core in order to determine how to route the message; and

means for determining a quality of service guarantee for the message, said quality of service guarantee is associated with a reserved bandwidth;

wherein each filter describes a set of events that a subscriber is interested in receiving from publishers.

Claim 22 (Canceled).

Claim 23 (Previously Amended): The apparatus of claim 21, wherein said processor further comprises means for selective routing the message if the data attribute satisfies each of the plurality of filters and based on the quality of service guarantee.

Claim 24 (Previously Amended): The apparatus of claim 21, wherein said processor further comprises means for discarding the message if the data attributes do not satisfy all of the filters stored at the router.

Claim 25 (Cancelled).

Claim 26 (Previously Amended): The apparatus of claim 21, wherein said processor further comprising means for performing the filtering step at a router in the network core.

Claim 27 (Original): The apparatus of claim 21, wherein the apparatus is a router.